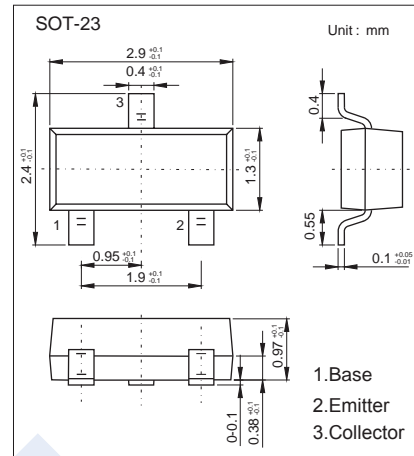


## NPN Transistors

### 2KD3010

#### ■ Features

- High Voltage
- High Transition Frequency
- Complementary to 2KB4018



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	140	V
Collector - Emitter Voltage	$V_{CE0}$	100	
Emitter - Base Voltage	$V_{EB0}$	6	
Collector Current - Continuous	$I_C$	800	mA
Base Current	$I_B$	100	
Collector Power Dissipation	$P_C$	300	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to 150	

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{CB0}$	$I_C = 1\text{mA}, I_E = 0$	140			V
Collector-emitter breakdown voltage	$V_{CE0}$	$I_C = 10\text{mA}, I_B = 0$	100			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 1\text{mA}, I_C = 0$	6			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = 120\text{V}, I_E = 0$			100	nA
Emitter cut-off current	$I_{EB0}$	$V_{EB} = 5\text{V}, I_C = 0$			100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$			0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$			1.2	
Base - emitter voltage	$V_{BE}$	$V_{CE} = 5\text{V}, I_C = 500\text{mA}$			1	
DC current gain	$h_{FE}$	$V_{CE} = 5\text{V}, I_C = 100\text{mA}$	100		300	
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$			30	pF
Transition frequency	$f_T$	$V_{CE} = 5\text{V}, I_C = 100\text{mA}$		120		MHz

#### ■ Marking

Marking	1C
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### NPN Transistors

### 2KD3010

■ Typical Characteristics

